

IMPORTANT ANTHRAPHONE NUMBERS P

Disease Reporting and Consultation Line 800-821-5821

- Healthcare Associated Infections Program207-287-6028207-293-7534 (fax)
- HIV, STD and Viral Hepatitis Program207-287-3747207-287-3498 (fax)
- Immunization Program207-287-3746207-287-8127 (fax)
- Infectious Disease Program800-821-5821800-293-7534 (fax)
- Tuberculosis Control Program800-821-5821207-293-7534 (fax)

Health and Environmental Testing Laboratory (HETL) 207-287-2727

- Bacteriology207-287-1704
- ••• Virology, Respiratory, Arboviral, and Serology 207-287-1722
- Molecular Biology, Sequencing, and Foodborne207-287-5769
- Mycobacteriology and Rabies 207-287-1706
- ··· Chlamydia/Gonorrhea 207-287-6244

Northern New England Poison Control 800-222-1222



A NOTE TO OUR COLLEAGUES

Maine Center for Disease Control and Prevention (Maine CDC) is pleased to provide you with this updated guide for laboratory reporting of notifiable conditions. This document incorporates changes to the Notifiable Condition Rules in 2015 and reflects current laboratory procedures and technology. We hope you find this guide useful.

Reporting of suspected or confirmed diseases or conditions designated as notifiable is mandated under Maine State Law [Title 22 M.R.S., Chapter 250, §820 and §822]. Though the primary responsibility of reporting lies with health care providers, the following entities are also required to report notifiable diseases in Maine: medical laboratories (including blood donor centers and blood banks), veterinarians, veterinary medical laboratories, health care facilities, child care facilities, correctional facilities, educational institutions, and local health officers.

In an effort to assist medical laboratories and blood banks in fulfilling these obligations, Maine CDC developed this guide for laboratory reporting. This reference provides Maine-specific information on notifiable diseases and conditions, contact information for key personnel and offices, and emergency contact information for after-hours calls.

If you require further information or if you have questions or concerns about disease reporting, please call Maine CDC's 24-hour Disease Reporting and Consultation Line at 800-821-5821. If you would like additional copies of this guide, a PDF version is available on Maine CDC's website at www.maine.gov/dhhs/mecdc/infectious-disease/epi/disease-reporting/.

Partnering for Prevention,

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Maine Center for Disease Control and Prevention

Maine Center for Disease Control and Prevention

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FREQUENTLY ASKED QUESTIONS







Q. Are laboratories and blood banks required to report notifiable conditions?

A. Yes, Maine State Law [22 M.R.S., Chapter 250, §820 and §822] requires laboratories and blood banks to immediately report the recognition or strong suspicion of the notifiable conditions indicated in this guide to public health authorities at Maine Center for Disease Control and Prevention (Maine CDC).

Q. To whom should reports of positive lab results or other markers of disease be submitted?

A. All reports should be submitted to Maine CDC. The reports may be made by calling the 24-hour Disease Reporting and Consultation Line at 800-821-5821 or by faxing the report to 800-293-7534.

Q. When and how should reports be submitted?

A. Notifiable conditions as indicated by the bold text and phone icon on the Reporting Procedures List contained in this guide, must be reported immediately by telephone on recognition or strong suspicion of disease. Non bolded, notifiable conditions require reporting by telephone, fax, or mail as soon as possible, but no later than 48 hours from the time of recognition or strong suspicion of disease. Telephone and fax should be the primary method of reporting. Written reports may be mailed to Maine Center for Disease Control and Prevention, Division of Disease Control, 286 Water Street. 11 State House Station. Augusta. ME 04330-0011.

Q. What information should be provided to the public health authorities?

A. Disease reports must include all pertinent information including: disease or condition diagnosed or suspected; patient's name, date of birth, address, phone number, and race; diagnostic laboratory findings, including test type, and dates of test relevant to the notifiable condition; health care provider name, address, and phone number; and name and phone number of the person making the report. A disease report form is available for download at www.maine.gov/dhhs/mecdc/infectious-disease/epi/disease-reporting/documents/notifiable-form.doc.

Q. Which isolates or specimens must be submitted to HETL?

A. The Reporting Procedures Table in this guide contains information about which agents are required by state law to be submitted to HETL. Many clinical laboratories utilize the services of reference laboratories at their discretion. State law requires that isolates or specimens that relate to notifiable conditions, noted as "Yes" in the "Lab Submission of Isolates or Specimens for Confirmation Required" column, must be submitted to HETL, regardless of where the test is performed. Maine laboratories participating in the Federal Laboratory Response Network (LRN) are also required to submit isolates or specimens when specific agents are suspected. Please visit www.selectagents.gov/SelectAgentsandToxinsList.html for a list of select agents and www.mainepublichealth.gov/lab for more information on submitting isolates and specimens to HETL.

Q. Does HETL participate in any national surveillance system?

A. Yes. HETL participates in the following surveillance systems:

<u>PulseNET</u>: PulseNET is a network of public health laboratories from the United States and Canada that strain type bacteria using Whole Genome Sequencing. PulseNET allows the linkage of cases and foodstuffs to outbreaks using an electronic database of assembled sequences from pathogenic bacteria including shiga toxin-producing *E. coli, Salmonella, Shigella, Campylobacter* and *Listeria*. For more information visit: www.cdc.gov/pulsenet.

<u>Laboratory Response Network</u>: Laboratory Response Network (LRN) is an integrated network of state and local public health, federal, military, and international laboratories that can respond to bioterrorism, emerging infectious diseases, chemical terrorism and other public health emergencies. LRN links state and local public health laboratories, veterinary, agriculture, military, and water- and food-testing laboratories in coordinated response.

Association of Public Health Laboratories: Association of Public Health Laboratories (APHL) works to strengthen laboratory systems serving the public's health in the United States and globally. APHL represents state and local governmental health laboratories in the United States. Its members, known as "public health laboratories," monitor, detect and respond to health threats. APHL works closely with federal agencies to develop and execute national health initiatives. During public health emergencies, it operates as a coordinating center for laboratory response. APHL also works internationally to build effective national laboratory systems and expand access to quality diagnostic testing services.

Antibiotic Resistance Lab Network: Antibiotic Resistance Lab Network (ARLN) supports nationwide lab capacity to rapidly detect antibiotic resistance in healthcare, food, and the community, and inform local responses to prevent spread and protect people. The AR Lab Network includes seven regional labs, the National Tuberculosis Molecular Surveillance Center (National TB Center), and labs in 50 states, five cities, and Puerto Rico. As a whole, the network tracks changes in resistance and helps identify and respond to outbreaks faster.

AR Lab Network Regional Labs and the National TB Molecular Surveillance Center detect existing and emerging types of antibiotic resistance, track emerging resistance more effectively, and generate stronger data to protect people and combat future resistance threats. This ambitious approach transforms the nation's laboratory landscape by establishing the much-needed infrastructure across the nation. This infrastructure will allow the public health community to rapidly detect emerging AR threats, sound the alarm for a comprehensive local response, and better understand these deadly threats so we can contain them quickly.

Q. Should organisms that are not on the list but are recognized in the scientific community as emerging pathogens be reported?

A. Yes, organisms such as *Candida auris*, extra-pulmonary non-tuberculous mycobacteria (NTM), non-mucoid Carbapenem-resistant *Pseudomonas aeruginosa*, and others can be reported as "unusual diseases."

Q. What is meant by "invasive" in the guide?

A. Invasive organisms are those that are isolated from a normally sterile site, such as blood, cerebrospinal fluid (CSF), pleural fluid, peritoneal fluid, pericardial fluid, bone, joint/synovial fluid, or internal body site (e.g., lymph node, brain).

Q. Are physicians required to report notifiable conditions too?

A. Yes, physicians are required to report notifiable diseases to Maine CDC. Information is collected on disease onset, symptoms, treatment, occupation, illness in family members, hospitalization, etc. and supplements the information reported by medical laboratories. Conditions indicated by the bolded text and phone icon on the Reporting Procedures List contained in this guide should be reported immediately upon clinical suspicion.

Q. Is electronic laboratory reporting of test results available?

A. Yes, electronic laboratory reporting to Maine CDC is available. Currently Maine CDC receives electronic laboratory reports from some national reference laboratories and HealthInfoNet. Conditions indicated by the bolded text and phone icon on the Reporting Procedures List contained in this guide must be reported immediately by telephone upon recognition or strong suspicion of disease prior to availability of test results. Telephone reporting of conditions and paper-based electronic laboratory reporting are still utilized. For more information about implementing electronic laboratory reporting, call the Disease Reporting and Consultation Line at 800-821-5821.

Q. Is reporting required for agencies that perform donor testing?

A. Yes, blood banks, tissue banks and organ procurement organizations must report positive results of notifiable conditions to Maine CDC.

Q. Are HIV related tests reportable?

A. Yes, all confirmed positive HIV antibody tests, all results of viral load tests, and all results of CD4 lymphocyte counts are reportable. Reports can be submitted by telephone to 800-821-5821, by fax to 207-287-3498, or by mail to Maine Center for Disease Control and Prevention, HIV Surveillance, 286 Water Street, 11 State House Station, Augusta, ME 04330-0011.

REPORTING PROCEDURES HEMO







ABBREVIATIONS AND ACRONYMS

AFB	Acid-fast Bacillus	HBsAg	Hepatitis B Surface Antigen	OXA	Oxacillinase
CIA	Chemiluminescence Immunoassay	HBV	Hepatitis B Virus	PCR	Polymerase Chain Reaction
COHb	Carboxyhemoglobin	HCV	Hepatitis C Virus	RIBA	Recombinant ImmunoBlot Assay
CSF	Cerebrospinal Fluid	IFA	Immuno Fluorescence Antibody	RNA	Ribonucleic Acid
CRE	Carbapenemase resistant Enterobacteriaceae	IgG	Immunoglobulin G	RPR	Rapid Plasma Reagin
DFA	Direct Fluorescent Antibody	IgM	Immunoglobulin M	RT-PCR	Reverse Transcriptase Polymerase Chain Reaction
EIA	Enzyme Immunoassay	IGRA	Interferon Gamma Release Assay	TPPA	Treponema Pallidum Particle Agglutination
ELISA	Enzyme-linked Immunosorbent Assay	IMP	Imipenemase metallo-ß-lactamase	TRF	Time Resolved Florescence
GES	Guiana extended-spectrum ß-lactamase	KPC	Klebsiella pneumoniae carbapenemase	VIM	Verona integron-encoded metallo-ß-lactamase
HAV	Hepatitis A Virus	LRN	Laboratory Response Network	VDRL	Venereal Disease Research Laboratory Test
НВс	Hepatitis B Core	NAAT	Nucleic Acid Amplification Test	WGS	Whole Genome Sequencing
HBeAg	Hepatitis Be Antigen	NDM	New Delhi metallo-ß-lactamase		



Diseases/conditions indicated with the phone icon and in bold must be immediately reported by telephone to Maine CDC (800-821-5821).

AGENT	DISEASE/CONDITION	WHAT TO REPORT TO MAINE CDC	LAB SUBMISSION OF ISOLATES OR SPECIMENS FOR CONFIRMATION REQUIRED	TESTING PERFORMED AT HETL
Acid fast bacillus	Suspected M. <i>tuberculosis</i> or non-tuberculous Mycobacteria	Smear or culture positive from any site	Yes; Associated specimen	AFB smear, AFB culture, WGS, 16S Sequencing, RT-PCR
Anaplasma phagocytophilum	Anaplasmosis	Positive by any method	No	RT-PCR
Arboviruses: Eastern (EEE), Venezuelan, and Western Equine Encephalitis (WEE), Powassan virus, St. Louis Encephalitis, West Nile Virus, Deer tick virus	Arboviral infection, viral encephalitis/meningitis	Positive by any method	No (not required but requested)	IgM for Eastern Equine Encephalitis, St. Louis Encephalitis, West Nile Virus RT-PCR for Powassan, Deer tick virus
Arenaviruses (Lassa, Junin)	Viral hemorrhagic fever	Positive by any method	No (not required but requested)	Confirmatory testing may be performed by federal CDC
Babesia microti	Babesiosis	Positive blood smear, NAAT or serologic evidence, PCR	No	PCR

AGENT	DISEASE/CONDITION	WHAT TO REPORT TO MAINE CDC	LAB SUBMISSION OF ISOLATES OR SPECIMENS FOR CONFIRMATION REQUIRED	TESTING PERFORMED AT HETL
Bacillus anthracis	Anthrax	Positive by any method	Yes	PCR, culture
				Reportable by LRN
Bordetella pertussis	Pertussis	Positive by any method	No	PCR
Borrelia burgdorferi	Lyme disease	ELISA positive or equivocal; Immunoblot positive or equivocal	No	
Brucella spp.	Brucellosis	Positive by any method	Yes	PCR, culture Reportable by LRN
Burkholderia mallei	Glanders	Positive by any method	Yes	PCR, culture Reportable by LRN
Burkholderia pseudomallei	Melioidosis	Positive by any method	Yes	PCR, culture Reportable by LRN
Campylobacter spp.	Campylobacteriosis	Positive by any method	No	PCR, culture, PFGE, WGS, serotyping
Carbon Monoxide	Carbon Monoxide Poisoning	Carboxyhemoglobin (COHb) level ≥5%	No	
Chlamydia psittaci	Psittacosis	Positive culture or serologic evidence	No	
Carbapenem-resistant Enterobacteriaceae (CRE)	CRE Infection or Colonization	Enterobacteriaceae spp. resistant to any carbapenem tested (e.g. imipenem, meropenem, doripenem, or ertapenem) OR produces a carbapenemase	No (not required but requested)	PCR for gene family NDM, KPC, VIM, GES, OXA WGS
Chikungunya Virus	Chikungunya	Suspect or confirmed case	No, but recommended if suspect	Chikungunya PCR
Chlamydia trachomatis	Chlamydia trachomatis, all genital infections including lymphogranuloma venereum (LGV) and eye infections	Positive by any method	No	NAAT
Clostridium botulinum	Botulism	Positive culture or toxin in blood or stool	Yes	Reportable by LRN
Clostridium tetani	Tetanus	Positive culture	Yes	Culture
Coronavirus, Novel and SARS-CoV, MERS-CoV	Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), Novel Coronavirus	Positive by any method	Yes	Confirmatory testing will be performed by federal CDC

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AGENT	DISEASE/CONDITION	WHAT TO REPORT TO MAINE CDC	LAB SUBMISSION OF ISOLATES OR SPECIMENS FOR CONFIRMATION REQUIRED	TESTING PERFORMED AT HETL
Corynebacterium diphtheriae	Diphtheria	Positive culture	Yes	Culture, DNA sequencing
Coxiella burnettii	Q fever	Positive by any method	No	PCR Reportable by LRN
Creutzfeldt-Jakob agent	Creutzfeldt-Jakob Disease	Positive by any method in patients younger than 55 years of age	No	
Cryptosporidium spp.	Cryptosporidiosis	Positive by any method	No (not required but recommended)	PCR
Cyclospora	Cyclosporiasis	Positive by any method	No	
Dengue Virus	Dengue disease	Suspect or confirmed case	No	RT-PCR
Ehrlichia chaffeensis	Ehrlichiosis	Positive by any method	No	RT-PCR
Escherichia coli, Shiga toxin producing	Shiga toxin-producing E. coli (STEC) disease	Positive shiga toxin producing E. coli	Yes	PCR 0157:H7/Shiga toxin1/Shiga toxin2, culture, PFGE, WGS
Escherichia coli O157	E. coli O157 disease including hemolytic-uremic syndrome (HUS)	Positive E. coli O157 culture, positive shiga toxin in stool	Yes	PCR 0157:H7/Shiga toxin1/Shiga toxin2, culture, PFGE, WGS
Filoviruses (Ebola, Marburg)	Viral hemorrhagic fever	Positive by any method	Yes	Ebola: RT-PCR Marburg: Performed at federal CDC Reportable by LRN
Francisella tularensis	Tularemia	Positive by any method	Yes	PCR, culture Reportable by LRN
Giardia lamblia	Giardiasis	Positive by any method	No	
Haemophilus ducreyi	Chancroid	Positive by any method	No	
Haemophilus influenzae	Haemophilus influenzae, invasive disease	Positive by any method, from invasive sites only	Yes	WGS, serogroup identification, culture
Hantavirus	Hantavirus Pulmonary Syndrome	Positive IgM or rising IgG titer or positive RNA by NAAT or positive immunochemistry	No	Confirmatory testing recommended at federal CDC

AGENT	DISEASE/CONDITION	WHAT TO REPORT TO MAINE CDC	LAB SUBMISSION OF ISOLATES OR SPECIMENS FOR CONFIRMATION REQUIRED	TESTING PERFORMED AT HETL
Hepatitis A virus	Hepatitis A	Positive serology for IgM anti-HAV	No	
Hepatitis B virus	Hepatitis B	Positive serology for HBsAg, anti- HBc, IgM anti-HBc, HBeAg or HBV DNA (positive or detectable).	No	
Hepatitis C virus	Hepatitis C	Positive serology for anti-HCV (including signal-to-cut-off ratio for EIA, CIA, MEIA, or CMIA); Positive anti-HCV RIBA; Positive or detectable HCV RNA (PCR, bDNA, TMA), Genotype, and ALT >200 IU/L (in combination with one or more positive or detectable HCV result).	No	EIA
Hepatitis D virus	Hepatitis D	Positive by any method	No	
Hepatitis E virus	Hepatitis E	Positive by any method	No	
Human Immunodeficiency Virus	HIV and AIDS	Confirmed, positive antibody tests Viral load tests, all results CD4 lymphocyte counts, all results	No	EIA, 4th generation Ag/Ab Geenius™ HIV 1/2 confirmation
Influenza, novel	Influenza, novel	Positive influenza A, unable to serotype or novel strain	Yes	PCR screening A/B and PCR subtyping H1N1, H3N2, H5, H7, culture, Drug Resistance by Pyrosequencing
Legionella spp.	Legionellosis	Positive by any method	No	
Leptospira interrogans	Leptospirosis	Positive by any method	No	PCR, culture, PFGE
Listeria monocytogenes	Listerioisis	Positive by any method	Yes	Culture, WGS
Monkeypox Virus	Monkeypox	Positive by any method	Yes	PCR Reportable by LRN
Mumps virus	Mumps	Paired sera showing rising IgG titer, single serum showing mumps IgM antibody, positive viral culture, RT-PCR	Yes	IgG serology, RT-PCR, culture IgM to federal CDC
Mycobacterium tuberculosis	Tuberculosis	Positive AFB smear (including subsequent culture result), or historic evidence of disease (Negative culture results on follow up specimens must also be reported) Clinical suspicion of active disease	Yes	AFB smear, culture, genotyping, IGRA, PCR, drug susceptibilities Drug susceptibilities forwarded to California Department of Public Health

REPORTING PROCEDURES HEMORRHAGIC FE

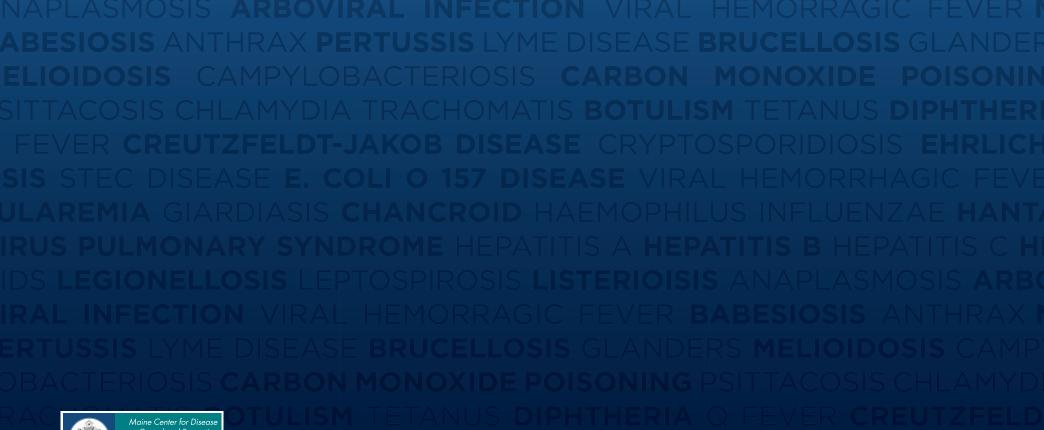






AGENT	DISEASE/CONDITION	WHAT TO REPORT TO MAINE CDC	LAB SUBMISSION OF ISOLATES OR SPECIMENS FOR CONFIRMATION REQUIRED	TESTING PERFORMED AT HETL
Neisseria gonorrhoeae	Gonorrhea, Gonococcal conjuctivitis	Positive by any method from all body sites	No	NAAT, culture, DFA
Neisseria meningitidis	Meningococcal disease, Invasive	Positive culture from invasive sites only; see Q & A definition; or Gram stain showing Gram-negative diplococci in CSF or blood	Yes	PCR, culture, serotyping, WGS
Norovirus	Gastrointestinal infections	Positive by any method ONLY when outbreak is suspected	No, if individual cases	RT-PCR GI/GII
			Yes, for outbreaks; only at the request of Maine CDC	
Plasmodium spp.	Malaria	Positive blood smear or NAAT	No	PCR
Polio virus	Poliomyelitis	Positive viral culture or NAAT	Yes	Confirmatory testing will be performed by federal CDC
Rabies virus, animal	Rabies	Domestic animal or human exposure to either high risk wildlife or domestic animals	Yes , if indicated after consultation with Maine CDC	DFA
Rabies virus, human	Rabies	Clinical symptoms consistent with human Rabies virus	Yes	Confirmatory testing will be performed by federal CDC
Ricin	Ricin Poisoning	Positive by any method	Yes	TRF-ELISA
				Reportable by LRN
Rickettsia rickettsii	Spotted Fever Rickettsiosis	Positive by any method	No	
Rubella virus	Rubella (German Measles), including congenital	Paired sera showing rising IgG titer, single serum showing rubella IgM antibody, positive viral culture, RT-PCR	Yes	Confirmatory testing will be performed by federal CDC
Rubeola virus	Measles	Paired sera showing rise in IgG titer, single serum showing measles IgM antibody, positive viral culture, RT-PCR	Yes	IgG Serology, RT-PCR
Salmonella species including typhi	Salmonellosis including Typhoid fever	Positive culture	Yes	Culture, PFGE, WGS, serotyping

AGENT	DISEASE/CONDITION	WHAT TO REPORT TO MAINE CDC	LAB SUBMISSION OF ISOLATES OR SPECIMENS FOR CONFIRMATION REQUIRED	TESTING PERFORMED AT HETL
Saxitoxin, domoic acid	Paralytic Shellfish Poisoning	Positive by any method	No	Confirmatory testing may be facilitated in collaboration with Department of Marine Resources
Shigella spp.	Shigellosis	Positive culture	Yes	Culture, WGS, serogrouping, PFGE
Staphylococcus aureus	Methicillin-resistant Staphylococcus aureus	Positive culture from invasive sites only; see Q & A definition	No	WGS
Staphylococcus aureus Vancomycin intermediate (VISA) or Vancomycin resistant (VRSA)	Staphylococcal disease	Positive culture from any site	Yes	WGS MecA, MecC gene confirmation and VanA, VanB, VanC-2 gene detection
Staphylococcal enterotoxin B	Staphylococcal enterotoxin B poisoning	Positive for toxins A through E from blood or urine by any method	No	Reportable by LRN
Streptococcus pneumoniae	Streptococcus pneumoniae invasive disease	Positive culture from invasive sites only, see Q & A definition; include antibiotic susceptibility pattern.	No	WGS, serogrouping
Streptococcus pyogenes (Group A Beta Hemolytic Strep)	Group A streptococcal invasive disease	Positive culture from invasive sites only, see Q & A, or any surgical site	No	
Treponema pallidum	Syphilis	Positive by any method including RPRs	No	TPPA, RPR, VDRL (CSF only)
Trichinella spp.	Trichinosis	Positive biopsy or serology	No	
Vaccinia virus	Vaccinia infection	Positive by any method	Yes	PCR Reportable by LRN
Varicella-zoster virus	Chicken pox	Positive by any method	No	PCR, IgG serology
Variola virus	Smallpox	Positive by any method	Yes	Confirmatory testing will be performed by federal CDC
Vibrio spp., including cholera	Vibriosis, including cholera	Positive by any method	Yes	Culture, WGS, serogrouping
Yellow fever virus	Yellow fever	Positive by any method	No	
Yersinia pestis	Plague	Positive by any method	Yes	PCR, culture Reportable by LRN
Zika virus	Zika	Positive by any method	No	RT-PCR





Maine Center for Disease Control and Prevention

Infectious Disease Program 800-821-5821 www.mainepublichealth.gov Maine Center for Disease Control and Prevention (Maine CDC)

www.mainepublichealth.gov

Infectious Disease Program
Disease Reporting

www.maine.gov/dhhs/mecdc/infectious-disease/epi/ disease-reporting

Health and Environmental Testing Laboratory (HETL)www.mainepublichealth.gov/lab

Rules for the Control of Notifiable Conditions

www.maine.gov/dhhs/mecdc/infectious-disease/epi/ disease-reporting/documents/notifiable-conditions.doc (Word) www.maine.gov/dhhs/mecdc/infectious-disease/epi/

www.maine.gov/dhhs/mecdc/infectious-disease/epi/ disease-reporting/documents/notifiable-conditions.pdf (PDF)

Notifiable Conditions List

www.maine.gov/dhhs/mecdc/infectious-disease/epi/ disease-reporting/documents/notifiable-list.pdf (PDF)

Notifiable Conditions Reporting Form

www.maine.gov/dhhs/mecdc/infectious-disease/epi/ disease-reporting/documents/notifiable-form.doc (Word)

www.maine.gov/dhhs/mecdc/infectious-disease/epi/ disease-reporting/documents/notifiable-form.pdf (PDF)